

CLAIMS

What is claimed is:

Sub A 1 A method for developing a technical configuration and electronically delivering to a client from a server an order report for the technical configuration, the method comprising:

(a) interactively eliciting and electronically receiving from a user on the client a desired technical configuration, wherein the act of interactively eliciting and electronically receiving comprises providing to the client from the server a limited configuration engine and performing a first, limited check on the viability of the desired technical configuration on the client using the limited configuration engine;

(b) performing a second, final check on the viability of the desired technical configuration using a full configuration engine on the server; and

(c) in response to the final check, preparing and outputting on the client an electronic order report.

2. The method of claim 1 wherein the limited configuration engine comprises limited option attributes and limited option rules.

3. The method of claim 1 wherein the full configuration engine comprises full option attributes and full option rules.

4. The method of claim 1 wherein the act of providing a limited configuration engine comprises downloading configuration information and configuration programs from the server to the client.

5. The method of claim 1 further comprising receiving from an information provider an electronic file including technical configuration information.

6. The method of claim 1 further comprising uploading the desired technical configuration from the client to the server.

7. The method of claim 6 wherein the act of performing a second, final check further comprises finding an exact match between the desired technical configuration and a viable configuration.

8. The method of claim 1 wherein the act of interactively eliciting and electronically receiving further comprises enabling the user to specify whether an exact match or a loose match is desired between the desired technical configuration and a viable configuration.

9. The method of claim 1 wherein the act of interactively eliciting and electronically receiving on the client further comprises using templates of pre-configured information.

10. The method of claim 1 wherein the electronic order report includes pricing information.

11. In a computer network having at least one server connectable to at least one client, a method for creating technical configurations and electronically delivering order reports to at least one client, the method comprising:

- (a) interactively eliciting from a user on the at least one client a desired subset of possible products having technical configurations;
- (b) in response to the user's desired subset of possible products having technical configurations, downloading from the at least one server to the at least one client limited configuration information and limited configuration programs;
- (c) interactively eliciting from the user on the at least one client a desired technical configuration and preliminarily checking at the at least one client the viability of the

desired technical configuration using the limited configuration information and the limited configuration programs;

- (d) uploading the desired technical configuration from the at least one client to the at least one server and performing a full check on the viability of the desired technical configuration using full configuration information and full configuration programs on the at least one server; and
- (e) responsive to the full check, preparing and outputting on the at least one client an electronic order report.

12. The method of claim 11 further comprising using a TCP/IP connection to pass an HTTP request from the client to the server.

13. The method of claim 11 wherein the limited configuration information comprises limited option attributes and limited option rules.

14. The method of claim 11 wherein the limited configuration programs comprise an HTML page and client-side programs.

15. The method of claim 14 wherein the client-side programs comprise a plug-in or helper-application.

16. The method of claim 14 wherein the client-side programs include one or more programs selected from Java, JavaScript, ActiveX, and Helper-Viewer.

17. The method of claim 14 wherein the client-side programs are cached on the client.

18. The method of claim 17 wherein the client-side programs are cached in client-side memory.

19. The method of claim 17 wherein the client-side programs are cached on client-side disk storage.

20. The method of claim 11 wherein the act of performing a full check comprises executing a CGI script on the server.

21. The method of claim 11 further comprising:

(f) in response to the act of performing a full check on the viability of the desired technical configuration on the at least one server, allocating and downloading to the at least one client additional limited configuration information; and

(g) receiving from the at least one client a second desired technical configuration developed from client processing of the additional limited configuration information.

22. The method of claim 11 wherein the act of interactively eliciting and electronically receiving further comprises enabling the user to specify whether an exact match or a loose match is desired between the desired technical configuration and a viable configuration.

23. The method of claim 11 wherein the act of interactively eliciting and electronically receiving on the client further comprises using templates of pre-configured information.

24. In a computer network having at least one server connectable to at least one client, a method for creating vehicle configurations and electronically delivering order reports to at least one client, the method comprising:

(a) interactively eliciting from a user on the at least one client a desired make, model, and series for a vehicle;

(b) in response to the user's desired make, model, and series for a vehicle, downloading from the at least one server to the at least one client limited configuration information and limited configuration programs;

(c) interactively eliciting from the user on the at least one client a desired vehicle configuration and preliminarily checking at the at least one client the viability of the desired vehicle configuration using the limited configuration information and the limited configuration programs;

(d) uploading the desired vehicle configuration from the at least one client to the at least one server and performing a full check on the viability of the desired vehicle configuration using full configuration information and full configuration programs on the at least one server; and

(e) responsive to the full check, preparing and outputting on the at least one client an electronic order report.

25. A method for developing a product configuration in a client-server environment, wherein the server has full option attributes and full option rules, the method comprising:

(a) receiving initial product configuration data from a user on a client;

(b) in response to the initial product configuration data, allocating limited option attributes and limited option rules to the client by downloading such limited option attributes and limited option rules to the client;

(c) receiving from the client a first proposed product configuration developed from client processing of the limited option attributes and limited option rules;

(d) in response to the proposed product configuration and application at the server of the full option attributes and full option rules to the proposed product configuration, allocating and downloading to the client additional option rules; and

(e) receiving from the client a second proposed product configuration developed from client processing of the limited option attributes and additional option rules.

26. The method of claim 25 wherein act (b) further comprises allocating an HTML page and client-side programs to the client by downloading such an HTML page and client-side programs to the client.

27. The method of claim 25 wherein the act of receiving initial product configuration data from a user on a client includes enabling the user to specify whether an exact match or a loose match is desired between the desired technical configuration and a viable configuration.

28. The method of claim 25 wherein the act of receiving initial product configuration data from a user on a client includes enabling the user to select templates of pre-configured product configurations.

29. In a computer network having at least one server connectable to at least one client, an apparatus for creating technical configurations and electronically delivering order reports to at least one client, the apparatus comprising:

(a) a limited configuration engine, wherein the limited configuration engine is downloaded from the at least one server to the at least one client in response to data elicited from the at least one client, and wherein the limited configuration engine contains programs to interactively elicit from a user a desired configuration to be uploaded to the at least one server; and

(b) a full configuration engine on the at least one server, wherein the full configuration engine contains instructions for performing a full check on the viability of the desired configuration.

30. The apparatus of claim 29 wherein the limited configuration engine comprises limited configuration information and limited configuration programs.

31. The apparatus of claim 29 wherein the limited configuration engine comprises limited option attributes and limited option rules.

32. The apparatus of claim 29 wherein the limited configuration engine contains programs for performing a limited check on the viability of the desired configuration.

33. The apparatus of claim 29 wherein the full configuration engine comprises full configuration information and full configuration programs.

34. The apparatus of claim 29 wherein acts of uploading and downloading are carried out over the Web.

35. The apparatus of claim 29 wherein the full configuration engine is a CGI script.

36. The apparatus of claim 29 wherein the limited configuration engine comprises an HTML page and client-side programs.

37. The apparatus of claim 36 wherein the client-side programs comprise a plug-in or helper-application.

38. The apparatus of claim 36 wherein the client-side programs include one or more programs selected from Java, JavaScript, ActiveX, and Helper-Viewer programs.

39. A computer-readable medium whose contents cause a computer system to perform a procedure for developing a product configuration in a client-server environment, the

computer-readable medium having client programs and server programs with functions for invocation, by performing the acts of:

- (a) interactively eliciting from a user on the client a desired subset of possible products having technical configurations;
- (b) in response to the user's desired subset of possible products having technical configurations, downloading from the server to the client limited configuration information and limited configuration programs;
- (c) interactively eliciting from the user on the client a desired technical configuration and preliminarily checking at the client the viability of the desired technical configuration using the limited configuration information and the limited configuration programs;
- (d) uploading the desired technical configuration from the client to the server and performing a full check on the viability of the desired technical configuration using full configuration information and full configuration programs on the server; and
- (e) responsive to the full check, preparing and outputting on the client an electronic order report.

40. The computer-readable medium of claim 39, wherein the computer-readable medium further comprises programs with functions for invocation by performing the acts of:

- (f) in response to the act of performing a full check on the viability of the desired technical configuration on the server, allocating and downloading to the client additional limited configuration information; and

(g) receiving from the client a second desired technical configuration developed from client processing of the additional limited configuration information.